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ABSTRACT

This introductory guide to Census Bureau data that is currently available to microcomputer users on compact disc (CD-ROM) begins by explaining the types of information available, how CD-ROM works, and the hardware and software required to access the databases using a microcomputer. Descriptions of data currently available on CD-ROM include individual disks containing data on specific topics covered by the 1990 Census of Population and Housing, the most recent (1987) Economic Census, and the 1990 TIGER/Line Census. Options that enable microcomputer users to load subsets of the large files into spreadsheets, graphics packages, and other commercial software are also described. Ways in which economic and county and city data can be used are suggested, and sample tables displaying data on the balance of trade are provided. It is also noted that maps can be created from TIGER/LINE data with special software. A brief review of other information and/or publications available from the Bureau of the Census on this topic concludes this guide. (KRN)

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# Census, CD-ROM, and You!

## New Horizons for Microcomputer Users of Census Bureau Data

IR 054 090

U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

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**Census, CD-ROM, and You!**
*New Horizons for Microcomputer Users of Census Bureau Data*


**U.S. DEPARTMENT OF COMMERCE**
**Barbara Hackman Franklin**, Secretary
**Rockwell Schnabel**, Deputy Secretary

**ECONOMICS AND STATISTICS ADMINISTRATION**
**Mark W. Plant**, Acting Under Secretary for Economic Affairs and Administrator

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February 1992

# Keep This Booklet Handy!

This booklet can help you unlock more of the data treasures available from the Census Bureau than you ever dreamed possible.

It shows you how easy it is to become a compact disc—or "CD-ROM"—user. Pages 5-7 will help you learn more about CD-ROM technology. If no introduction is necessary, turn to pages 8-12 for an account of Census Bureau data on disc. Pages 13-19 show you the kind of tabulations found on the discs.

Information previously available only to the users of computer tape is now as near as your microcomputer.

As this booklet explains, the Census Bureau is using compact discs to release its large data bases.

On compact discs, you can access the 1987 Economic Censuses, the 1990 Census of Population and Housing, and many other data bases as well.

Compact discs were a big technological step for us at the Census Bureau, but a simple step for you to take.

All you need is a microcomputer, a CD-ROM reader, some applications software—and voila! You're in business!
The discs are designed to be accessible through most data base software packages and are easy to use.

## Contents at a Glance


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## You Probably Use a Microcomputer!

*We use PC's to perform many tasks. They make our jobs and our lives easier.*

At work or at home, microcomputers have become trusty companions—practically members of the family. You'll find micros, or personal computers (PC's), just about everywhere: in offices, stores, libraries, classrooms, even on trains and airplanes.

Americans use them to balance the books, prepare flow charts, generate labels, lay out newsletters, chart product sales, write novels, and play games.

Right now PC's are the largest share of the computer hardware market. In 1989, we bought $28 billion worth of them. In the 1990's, this market should climb to $50 billion plus.

And, as PC's become more portable, many of us will find it hard to leave home or work without them.

We like our PC's like our cars, souped up and powerful, and small but fast, like sports cars.

More and more, micros are doing the work previously reserved for mainframes and minicomputers. With gains in speed and power, PC's open up new worlds to more people than ever before. And you don't have to be a programmer to harness the power of the microcomputer.

This booklet describes some of these new vistas now within sight of the PC user. And it explains a new technology—compact discs—that helps make this all possible.

Armed with a PC and a compact disc reader, you can now use some of the largest data bases released by the Federal Government.



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## Let Us Help You Do Your Research!

Remember that census questionnaire you filled out?
We here at the U.S. Census Bureau took your questionnaire—and about 100 million others—and transferred your responses to computer tape. From these tapes, we churn out statistics. In doing so, we return the information to you.

Our Government uses these statistics to apportion seats in the U.S. House of Representatives. State and local governments use them in redrawing voting districts.

People use these statistics in many other ways: to plan business ventures, verify research, evaluate government projects, and apply for Federal grants.

Census statistics affect all of our lives in ways we don't often realize. The road you take to work each day, the commercial you hear on the radio as you drive, the school your children attend, the products your grocery stocks—all these have been influenced by the census.

But we don't just take the population and housing census!

Every 5 years, for example, we take other censuses: in years ending in 2 and 7, we conduct agriculture, economic, and governments censuses. These important programs help our Nation keep track of our economic vital signs.

In the years between censuses, we conduct numerous surveys that help us analyze trends.

**Census Bureau Data on Many Topics**

- Agriculture
- Construction
- Demographics
- Foreign Countries
- Foreign Trade
- Governments
- Housing
- Income
- Manufacturing
- Mineral Industries
- Population
- Racial and Ethnic Groups
- Retail Trade
- Services
- Transportation Industries
- Wholesale Trade

*Construction and trade—these are just a few of the many topics on which the Census Bureau gathers data. Our data focus on the Nation's people and products.*

## Data Almost Any Way You Want!

*Census Bureau data come in many forms: in printed reports, on microfiche, computer tape, floppy diskette—and on compact disc.*

All of this information is yours. Of course, the Census Bureau doesn't release confidential information about people or businesses, just the statistics you regularly hear about on the nightly news or read about in the papers.

You can get Census Bureau statistics in a variety of media: printed reports, computer tapes, floppy diskettes, and microfiche. We even have statistical data online.

No, you cannot get the entire census in a book. Census data bases are huge. We release tens of thousands of pages of data every year.

And that's not all of it. Our data bases are so large we couldn't possibly release everything in printed form.

We instead resort to magnetic tape; we release data on tape for use on a mainframe computer or a minicomputer. For example, *Summary Tape File 3*, one of our most popular census files, takes up 30,000 megabytes.

Up until very recently, you had to have access to a powerful computer to use tape files like these. They are simply too large for release on floppy diskette. The American Housing Survey occupies 100 megabytes—making it too large and expensive to release on diskette.

What if you did not have access to a mainframe or could not afford to pay run-time costs? Before, you had to look to a vendor who could provide a printout or download information onto floppies.

Direct access to these files was impossible.

But not anymore.



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## Compact Discs Have Miles of Data!

Now you do have access to large data bases like ours. We at the Census Bureau have begun to release data on compact disc.

These discs have enormous storage capacity. One disc has 663 megabytes of available space crammed into a spiral track that's 3 miles long.

That's enough room to hold the information found on 200,000 printed pages, 4 magnetic tapes at 6250 bits per inch, or 1,600 low-density floppies.

"CD-ROM" is short for "compact disc—read-only memory." This means you cannot change or update the information found on the disc. Your microcomputer can "read" the disc, but cannot "write" on it. The information is there permanently.

Think of CD-ROM as an electronic book. You can't change what's on the printed page. It's there as long as the book exists.

*One disc has as much space as 4 computer tapes or 1,600 floppies. CD-ROM can turn your micro-computer into a powerhouse, capable of accessing huge data bases.*

## Like Audio Discs—Only Better!

Do you have a CD player hooked up to your stereo at home or built into the dash of your car? If so, you're already familiar with compact discs.

Our CD-ROM's look exactly like the silver platters you spin in your CD player. In fact, the discs are physically identical—even at the microscopic level.

They are created the same way and their respective drives read them the same way. One disc can store text, tables, images, and music all at the same time. But don't try to run a CD-ROM on your audio disc player quite yet. There are differences between the players.

The disc is 12 centimeters (about 4 3/4 inches) in diameter and just over a millimeter thick (that's 1/25 of an inch). In the center is a hole about 5/8 inch across.

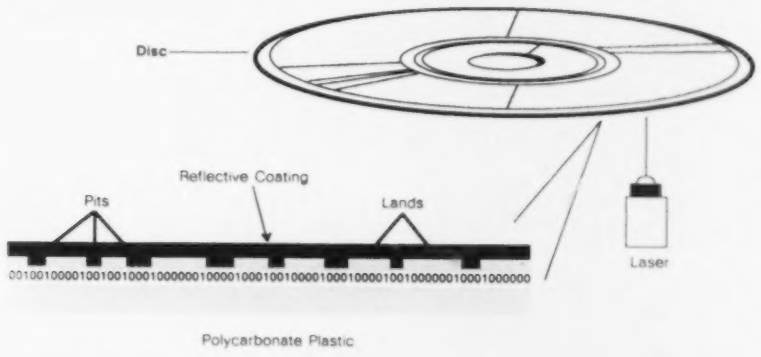
The disc is made of polycarbonate plastic and coated with reflective aluminum and a protective lacquer. The aluminum gives the disc its shine and this shine is what gets the data to you.

Like a phonograph record, the disc has a long, narrow spiral track. The track wraps around the disc again and again—about 3 miles in all, far longer than any LP.

This track is scored or pitted with 3 billion microscopic depressions. These are known as "pits"; the unscored areas between them are "lands." The depressions are uniform in depth, but both they and the lands differ in length, a fact significant in the way the laser reads the disc.

## How Does CD–ROM Work?

A CD is a plastic disc with a long continuous spiral. In the spiral track are numerous depressions called "pits"; the spaces between are "lands."




The disc is coated with aluminum. The laser in the disc drive reads the disc from the bottom. The pits disperse the light; the lands reflect it. A photo-detector registers the alternation of light and converts it into electrical impulses.

Change from a land to a pit or vice versa registers as a "1"; no change is a "0." The PC can now process the binary information and with the right software use it to display statistical tables on your monitor.

# The Light Fantastic

Here's where the shine comes in. The disc reader or drive has a set of lenses that precisely focus a laser beam on the track as the disc spins. The beam penetrates the plastic coating and strikes the reflective surface. Pits disperse the light; lands reflect it.

A sensor in the disc drive picks up these changes in light and interprets them in the binary code read by computers. A change between a pit and a land (or vice versa) is a "1"; when there's no change, you have a "0."

Unlike the phonograph record, the disc is read from the inside out, and its "needle"—the laser beam—strikes it from below.

There is a big difference in the standards that govern the organization of information on an audio disc and its CD-ROM cousin. Manufacturers have agreed upon certain standards just for CD-ROM's. Together these are known as the ISO 9660 logical format.

This format organizes data on CD-ROM's in a unique way. Among other things, it builds much more error-correction coding into CD-ROM's to ensure that the equipment—despite disc defects—makes no mistakes in reading data.

All Census Bureau discs are manufactured according to this standard and can therefore run on a wide variety of drives.

## How You Get Started

Hardware requirements are relatively simple. You need a microcomputer, of course. Census Bureau discs are designed for IBM®-compatible microcomputers, but can be used on Apple® computers, given the right software.

The key piece of equipment is a CD-ROM reader. You cannot insert a compact disc into a drive designed for a floppy!

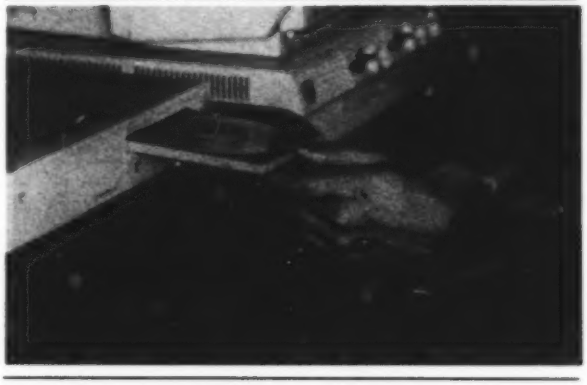
To hook up a reader to your PC, you simply install a drive controller (a circuit board) in one of the slots inside the computer and then connect the PC and the reader with a cable.

It's that easy.

### Give Your PC a Boost!

You're almost ready to begin. Once you've hooked up the hardware, you must install *CD-ROM® Extensions* (version 2.0 or higher) or similar systems software on your hard disk or access it on a diskette. This software enables your PC to talk to the attached CD drive. Many drive manufacturers ship a copy of this software with the drive. Call Customer Services if you have further questions.

*Extensions* makes it possible for any personal computer running the MS-DOS or PC-DOS operating system to read data from a CD-ROM manufactured according to ISO 9660 specifications. With *Extensions*, MS-DOS views the CD as just another disk drive.



*Slide the disc into the drive and you're ready to go.*

Actually, *Extensions* consists of two programs. One is called "MSCDEX.EXE" and involves adding a line to your AUTOEXEC. BAT file identifying MSCDEX.EXE and the letter for your CD-ROM drive (usually "L"). This program overcomes the 32-megabyte disk limitation of DOS. The 600+ megabyte size of the compact disc makes this extension necessary to read the drive.

The second program is designed to enable your PC to recognize the particular make of drive you are using. This program names the driver in the CONFIG.SYS file and, as a result, varies according to the make of the drive. Similar drivers are necessary when you install other kinds of peripherals such as a mouse.

The important thing to know about *CD-ROM Extensions* is that you'll need it to use Census Bureau discs, even if you are currently running other CD-ROM's without it. In addition, the *Extensions* may affect the CD-ROM applications that are already running.

All versions of *CD-ROM Extensions* work the same way, but installation procedures may vary slightly from one supplier to another.

So, although installing this software is usually easy, you may want to get some guidance from someone with expertise in installing software.

# Census Bureau Data You Can Get on CD-ROM

"What data?" you ask. The answer is—lots! Population, trade, housing, agriculture—these are just a few of the subjects for which you can get data on disc.

Below is a description of the discs you can get right now. But we are busily releasing more and more files on CD-ROM all the time, so call us at Customer Services (301-763-4100) if you don't see just what you want.

***Agriculture.*** Are you studying the Nation's agricultural industries?

We take a census of agriculture every 5 years (the most recent was 1987) and you can get the statistics on disc. The subjects cover all aspects of farming: land used, livestock, poultry, crops grown, income, expenses, etc.

### The Street Where You Live—And Everywhere Else

Data from the 1990 census are available for a host of different kinds of geographic areas. In the census, we release statistics for the areas listed below. These areas are on the *Public Law 94-171 Files* and on the various *Summary Tape Files* although the geography will differ from file to file. Much of the data will be on CD-ROM.

**Geographic Areas Reported on in Census Bureau Products**

United States
Regions
Divisions
States
Metropolitan areas
Urbanized areas
Congressional districts
ZIP Codes
American Indian and Alaska Native areas
Counties
Minor civil divisions and census county divisions
Places (such as cities, villages, and census designated places)
Census tracts and block numbering areas
Block groups
Blocks

NOTE: You can also get data for areas you yourself select and define, although not on CD-ROM. Check with Customer Services.

### 1990 Census Data Items

**Short-Form Subjects**

| Population | Housing |
|---|---|
| Household relationship | Number of units in structure |
| Sex | Number of rooms in unit |
| Race | Tenure (owned or rented) |
| Hispanic origin | Value of home or monthly rent |
| Age | Vacancy characteristics |
| Marital status | Congregate housing (meals included) |

**Long-Form (Sample) Subjects**

Education
Place of birth, citizenship, and year of entry to the United States
Ancestry
Language spoken at home
Migration (residence in 1985)
Disability
Fertility
Veteran status
Labor force
Occupation, industry, and class of worker
Place of work and journey to work
Income in 1989
Year last worked
Condominium status
Plumbing and kitchen facilities
Telephone in unit
House heating fuel
Source of water and method of sewage disposal
Vehicles available
Year structure built
Year moved into residence
Number of bedrooms
Farm residence
Shelter costs, including utilities

NOTE: The census long form also included short-form questions.

## 1990 Census of Population and Housing Data Products on CD-ROM

| 100-Percent Data | Date | Content |
|---|---|---|
| Public Law 94-171 Data | Available | First data from the 1990 census, used in legislative redistricting. Has population statistics based on short-form questionnaire (total population, voting-age population, race, Hispanic origin) and housing unit counts for States and subareas down to the block level. |
| STF 1A | Available | Population and housing statistics (more subjects than P.L. data) for States and their subareas in hierarchical sequence down to block group level. |
| STF 1B | Available | Extract with statistics for census blocks. Much less subject detail than STF 1A. |
| STF 1C | 1992 | Same tables as STF 1A for the larger geographic areas. |
| **Sample Data** | | |
| STF 3A | 1992 | Population and housing data from long-form questionnaire. Same geography as STF 1A. |
| STF 3B | 1993 | Extract from STF 3B with sample data for 5-digit ZIP Code areas. |
| STF 3C | 1993 | Sample data for same geographic areas shown on STF 1C. |
| Census/EEO Special File | 1992 | Data on occupation and educational attainment for age, sex, race, and Hispanic origin. Shown for counties, metro areas, and large places. |
| County-to-County Migration File | 1993 | State files showing migration between and within States. |
| Public Use Microdata | 1993 | Has sample of long-form questionnaires showing household responses: 5-percent sample county groups and 1-percent sample for metro areas. No identifying information so as to protect confidentiality. |
| Subject Reports | 1993 | Population and housing data on special topics. |

The disc has 1978, 1982, and 1987 data. Geographic areas: U.S., States, and counties. Cost: $150.

***Census of Population and Housing Data.*** No, you can't get the whole 1990 census on one disc, but CD-ROM is one of the best ways to get the most data you can (see chart). You can now get 1990 census statistics for areas as small as census tracts and blocks. The earliest statistics dealt only with total population, total housing units, race, Hispanic origin, and voting-age population.

These are the *Public Law 94-171 Counts* that States use in redrawing Congressional and State legislative districts. They are also available on computer tape and in printout form. Pages 13-14 show tabulations from these files. The P.L. 94-171 files for the entire Nation come on 10 discs costing $150 a disc. You can purchase the entire set ($1,000) or individual discs. (In 1980, the same data on tape cost $5,000!)

Now you can also get CD-ROM's with statistics on more of the topics covered in the census. We have released the popular *Summary Tape Files* (STF's) on CD-ROM. These files have statistics on all the short-form topics—age, race, home value, number of rooms, and so forth. STF 1A costs $150 per disc. The complete set of State files costs $1,700.

Midway in 1992 we will begin releasing the popular STF 3 files on disc. These files will contain sample data from the census: on income, education, employment, mortgage status, monthly housing expenses, etc.

***County and City Data Book.*** This is an all-purpose data base for all U.S. counties and large cities (population over 25,000). The disc has statistics on population, housing, race, education,

marriage and divorce, income, employment, occupation, and crime. It also has statistics on most sectors of the economy: manufacturing, retail and wholesale trade, banking, and so on. This CD gives you access to information from the Census Bureau and other sources.

Geographic areas: U.S., census regions and divisions, States, counties, cities of 25,000 or more, and (with less data) places of 2,500 or more. Cost: $125. (See also page 18.)

***County Business Patterns.*** Another old favorite now on disc. These statistics give industry detail (four-digit SIC) for virtually all U.S. industries. They show the number of establishments, employment size, and payroll. The data are vital for measuring business activity within States or counties. Two discs: 1986-87 and 1987-1988.

Geographic areas: U.S., States, and counties. Cost: $150 per disc.

**Economic Census Data on CD-ROM**

| Disc | Release Date | Content |
|---|---|---|
| **Volume 1** | | |
| 1D | Available | • *Retail:* GAS, Nonemployer Statistics, Merchandise Line Sales, Establishment and Firm Size, Historical Statistics<br>• *Wholesale:* GAS, Establishment and Firm Size, Commodity Line Sales, Historical Statistics<br>• *Services:* GAS, Nonemployer Statistics, Historical Statistics, Establishment and Firm Size<br>• *Construction:* GAS, Industry Series<br>• *Manufacturing:* GAS, Industry Series, Location of Manufacturing Plants, Historical Statistics<br>• *Mineral Industries:* GAS<br>• *Transportation:* GAS<br>• *Black-Owned Business, Women-Owned Business* |
| 1E | Early 1992 | All on 1D plus detailed product statistics, rest of minority-owned businesses, and specialized reports. |
| **Volume 2** | | |
| 2B | Available | Statistics for ZIP Code areas from censuses of agriculture, retail trade, manufacturing, and service industries. |

NOTE: GAS – Geographic Area Series. Data for States, MSA's, counties, and places. Construction and transportation have data for States and MSA's; minerals, for States and selected counties.

**What Are the Economic Censuses?**

Construction
Manufactures
Mineral Industries
Retail Trade
Services
Transportation
Wholesale Trade

**Related Programs**

Censuses of Puerto Rico and Outlying Areas
Characteristics of Business Owners
Enterprise Statistics
Survey of Minority-Owned Businesses
Survey of Women-Owned Businesses

NOTE: For more information, call Customer Services for a copy of the *Guide the 1987 Economic Censuses and Related Statistics.*

***Economic Census Data.*** The economic censuses, conducted every 5 years (the latest were for 1987), profile most sectors of the economy.

A series of seven cumulative discs—available as a subscription package—kept users up to date as the data from the censuses appeared.

Each disc in the series updated the one before. Disc 1D is the latest; everything on 1A, 1B, and 1C is also on 1D. The 1E disc will complete the first volume.

Volume 2 has statistics for ZIP Code areas. Disc 2A has retail data for 1982 and 1987 and services data for 1987. Disc 2B adds agriculture and manufactures data for 1987.

Geographic areas: U.S., States, counties, cities, and ZIP Code areas. Subscription package cost (including the ZIP Code discs): $475. Individual discs: $150. (See also pages 16-17.)

***Foreign Trade Data.*** Trade relations are a hot topic in the news. Are we gaining? Are we losing?

You can subscribe to receive a pair of discs each month that will keep you posted on the flow of commodities to and from overseas. The discs have statistics on about 14,000 commodities—a massive data base.

Geographic areas: foreign countries and U.S. Customs districts. Annual exports subscription cost: $1,200. Annual imports subscription cost: $1,200. Quarterly: $500. Individual months: $150. (See also page 19.)

***Housing Microdata.*** Unlike the other files described here, this file has microdata, not statistics.

Microdata are individual household records with no information that would disclose the identity of the respondents. You actually see the responses made by the household members—less any identification of the people themselves.

*Every household in America received a census questionnaire. You can now access some of the statistics generated by the 1990 census on compact disc! More will follow in the months ahead!*



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**Confidentiality Is A Must!**

In all this mountain of data, you won't find one name or address. The Census Bureau cannot by law identify any person, housing unit, or business responding to our censuses or surveys. The pledge of confidentiality continues for 72 years: after that, you can consult microfilms of census questionnaires at the National Archives. The Archives keeps economic census records confidential for 30 years.

We are especially careful with microdata—actual survey responses made anonymous through special modifications (such as using upper and lower limits on values, intervals, deletions, and random noise to mask actual values). Microdata do not include names, addresses, or other unique identification. The Census Bureau considers this a safe means of providing useful data.

So you can't find out how much your next-door neighbor makes by checking a Census Bureau report. But you can find out, for example, how many households or families in your community make over $75,000 a year.

These data come from the 1984-87 American Housing Survey and focus on the physical characteristics of the housing unit (number of rooms, building material, heating fuel, repairs and additions, insulation, etc.), respondents' attitudes toward their homes and neighborhoods, and the housing finance arrangements (monthly payments, utility costs, real estate taxes, etc.).

Geographic areas: U.S. and regions, selected metro areas, inside/outside central city, and urban/rural areas, and place size. Cost: $150. Ask for American Housing Survey 1984-87 data on CD-ROM.

***Population and Income Microdata***. Another microdata file like the one described above. The Census Bureau also releases microdata (household records without identifying information) from the Current Population Survey. This file is especially valuable for anyone studying the social and economic characteristics of households. It has information on income, earnings, employment, and mobility.

Geographic areas: U.S. and regions, States, selected metro areas, and central cities, metro/nonmetro areas, central city/noncentral city, and farm/nonfarm. Ask for Current Population Survey, March 1988-1990 or 1989-1991 file on CD-ROM: $150 per disc.

***TIGER/Line™ Census Files.*** Are you planning routes for emergency or delivery services? Are you tracking insect infestations across your region? Are you investigating the markets for new businesses? We might be able to help you map things out!

The *1990 Census TIGER/Line Files* contain latitude and longitude coordinates for line segments that form the boundaries of census blocks—for everywhere in the Nation. The files have the coordinates for roads, rivers, railroad tracks, city limits, etc.

For every polygon formed by these lines, the files also have codes for administrative, legal, and statistical areas (e.g., counties, cities, voting districts, census tracts, and census blocks). There are also address ranges and ZIP Codes for streets in the urban core of most metropolitan areas.

In most cases, a State comes on one disc. In some cases, the files for several States are on one CD-ROM. California comes on three discs, Texas on four. Florida, Illinois, Missouri, North Carolina, and Pennsylvania each come on two discs. The files are in ASCII format. Current cost per disc: $250. The complete set of 44 discs costs $11,000.

These files are the final census files—the versions that match the tabulated census data (that is, boundaries of government units as of January 1, 1990). We also plan to release actual TIGER maps on compact disc in the future. (See also page 20.)

For information about the TIGER/Line Files—and all our discs—call Customer Services at the Census Bureau (301-763-4100).

# What Software Does the Census Bureau Supply?

To access data on a compact disc, you need software. We've made it easy for you to use our discs by including simple retrieval software on many of our discs. This software makes the data available to even the most inexperienced user.

Entitled simply *GO*, this software is easy to use and requires no special computing skills. It offers a menu that leads you to the data in a very simple fashion.

The tables shown on this page were produced using the Census Bureau's *GO* software for the first data from the 1990 census—the P.L. 94-171 statistics used in redrawing legislative districts. The P.L. files have only a small portion of the subject detail from the census. But the geographic detail is substantial (see chart, page 8).

All you do is slide in the disc, choose the drive, type "GO," and the software takes over, leading you through a menu of options. You pick the geographic area (State, county, city, census tract, block, and so on). You can do this with your State or any State on a disc.

A version of this software is found on many of our discs. In some form, it will appear on all future discs.

## Our *GO* Software Gets You Going!

1990 Census Of Population And Housing  P.L. 94-171 Redistricting Data

New Jersey
Asbury Park city

| | |
|---|---|
| PERSONS | |
| Universe: Persons | |
| Total | 16,799 |
| RACE | |
| Universe: Persons | |
| White | 5,950 |
| Black | 9,977 |
| American Indian, Eskimo, or Aleut | 49 |
| Asian or Pacific Islander | 123 |
| Other race | 700 |
| RACE | |
| Universe: Persons 18 years and over | |
| White | 5,282 |
| Black | 6,534 |
| American Indian, Eskimo, or Aleut | 32 |
| Asian or Pacific Islander | 99 |
| Other race | 426 |
| HISPANIC ORIGIN AND RACE | |
| Universe: Persons | |
| Hispanic origin | 1,533 |
| Not of Hispanic origin: | |
| White | 5,458 |
| Black | 9,643 |
| American Indian, Eskimo, or Aleut | |
| Asian or Pacific Islan | |
| Other race | |
| HISPANIC ORIGIN AND RACE | |
| Universe: Persons 18 years | |
| Hispanic origin | |
| Not of Hispanic origin: | |
| White | |
| Black | |
| American Indian, Eskim | |
| Asian or Pacific Islan | |
| Other race | |
| HOUSING UNITS | |
| Universe: Housing units | |
| Total | |

1990 Census Of Population And Housing  P.L. 94-171 Redistricting Data

Illinois
Cook County
Tract 2919

| | |
|---|---|
| PERSONS | |
| Universe: Persons | |
| Total | 504 |
| RACE | |
| Universe: Persons | |
| White | 5 |
| Black | 498 |
| American Indian, Eskimo, or Aleut | 1 |
| Asian or Pacific Islander | 0 |
| Other race | 0 |
| RACE | |
| Universe: Persons 18 years and over | |
| White | 5 |
| Black | 320 |
| American Indian, Eskimo, or Aleut | 1 |
| Asian or Pacific Islander | 0 |
| Other race | 0 |
| HISPANIC ORIGIN AND RACE | |
| Universe: Persons | |
| Hispanic origin | 0 |
| Not of Hispanic origin: | |
| White | 5 |
| Black | 498 |
| American Indian, Eskimo, or Aleut | 1 |
| Asian or Pacific Islander | 0 |
| Other race | 0 |
| HISPANIC ORIGIN AND RACE | |
| Universe: Persons 18 years and over | |
| Hispanic origin | 0 |
| Not of Hispanic origin: | |
| White | 5 |
| Black | 320 |
| American Indian, Eskimo, or Aleut | 1 |
| Asian or Pacific Islander | 0 |
| Other race | 0 |
| HOUSING UNITS | |
| Universe: Housing units | |
| Total | 174 |

1990 Census Of Population And Housing  P.L. 94-171 Redistricting Data

Virginia
Accomack County
Accomac
Lee district (pt.)
Accomac town
BNA 9904 (pt.)

| | |
|---|---|
| PERSONS | |
| Universe: Persons | |
| Total | 464 |
| RACE | |
| Universe: Persons | |
| White | 400 |
| Black | 63 |
| American Indian, Eskimo, or Aleut | 0 |
| Asian or Pacific Islander | 1 |
| Other race | 0 |
| RACE | |
| Universe: Persons 18 years and over | |
| White | 341 |
| Black | 62 |
| American Indian, Eskimo, or Aleut | 0 |
| Asian or Pacific Islander | 1 |
| Other race | 0 |
| HISPANIC ORIGIN AND RACE | |
| Universe: Persons | |
| Hispanic origin | 2 |
| Not of Hispanic origin: | |
| White | 399 |
| Black | 62 |
| American Indian, Eskimo, or Aleut | 0 |
| Asian or Pacific Islander | 1 |
| Other race | 0 |
| HISPANIC ORIGIN AND RACE | |
| Universe: Persons 18 years and over | |
| Hispanic origin | 2 |
| Not of Hispanic origin: | |
| White | 340 |
| Black | 61 |
| American Indian, Eskimo, or Aleut | 0 |
| Asian or Pacific Islander | 1 |
| Other race | 0 |
| HOUSING UNITS | |
| Universe: Housing units | |
| Total | 204 |

# Display the 1990 Census Tabulations You Want With Commercial Software

PERCENT RACE POPULATION FOR ALL COUNTIES IN NEW YORK

| COUNTY NAME | TOTAL POPULATION | WHITE | BLACK | AMERICAN INDIAN | ASIAN | OTHER RACE |
|---|---|---|---|---|---|---|
| Albany County | 292,594 | 89.1 | 8.4 | 0.2 | 1.7 | 0.6 |
| Allegany County | 50,470 | 98.4 | 0.6 | 0.2 | 0.6 | 0.2 |
| Bronx County | 1,203,789 | 35.7 | 37.3 | 0.5 | 3.0 | 23.5 |
| Broome County | 212,160 | 95.7 | 2.0 | 0.2 | 1.7 | 0.4 |
| Cattaraugus County | 84,234 | 96.3 | 0.9 | 2.2 | 0.4 | 0.2 |
| Cayuga County | 82,313 | 95.1 | 3.6 | 0.3 | 0.4 | 0.5 |
| Chautauqua County | 141,895 | 96.1 | 1.7 | 0.4 | 0.4 | 1.5 |
| Chemung County | 95,195 | 92.8 | 5.5 | 0.2 | 0.7 | 0.7 |
| Chenango County | 51,768 | 98.5 | 0.7 | 0.3 | 0.3 | 0.2 |
| Clinton County | 85,969 | 93.7 | 4.4 | 0.2 | 0.8 | 0.9 |
| Columbia County | 62,982 | 95.1 | 3.9 | 0.2 | 0.4 | 0.5 |
| Cortland County | 48,963 | 98.3 | 0.7 | 0.3 | 0.5 | 0.3 |
| Delaware County | 47,225 | 98.1 | 1.0 | 0.2 | 0.4 | 0.3 |
| Dutchess County | 259,462 | 88.3 | 8.4 | 0.1 | 2.2 | 0.9 |
| Erie County | 968,532 | 85.9 | 11.3 | 0.6 | 1.1 | 1.1 |
| Essex County | 37,152 | 96.0 | 2.8 | 0.3 | 0.4 | 0.5 |
| Franklin County | 46,540 | 90.0 | 3.7 | 5.0 | 0.3 | 0.9 |
| Fulton County | 54,191 | 98.0 | 1.2 | 0.2 | 0.4 | 0.2 |
| Genesee County | 60,060 | 96.5 | 1.8 | 1.1 | 0.4 | 0.3 |
| Greene County | 44,739 | 93.0 | 4.9 | 0.3 | 0.4 | 1.5 |
| Hamilton County | 5,279 | 99.4 | 0.2 | 0.2 | 0.1 | 0.1 |
| Herkimer County | 65,797 | 99.2 | 0.3 | 0.2 | 0.2 | 0.1 |
| Jefferson County | 110,943 | 91.2 | 5.9 | 0.4 | 0.9 | 1.7 |
| Kings County | 2,300,664 | 46.9 | 37.9 | 0.3 | 4.8 | 10.0 |
| Lewis County | 26,796 | 98.8 | 0.4 | 0.2 | | |
| Livingston County | 62,372 | 96.2 | 2.4 | 0.3 | | |
| Madison County | 69,120 | 97.6 | 1.1 | 0.4 | | |
| Monroe County | 713,968 | 84.1 | 11.9 | 0.3 | | |
| Montgomery County | 51,981 | 96.5 | 0.9 | 0.2 | | |
| Nassau County | 1,287,348 | 86.6 | 8.6 | 0.1 | | |
| New York County | 1,487,536 | 58.3 | 22.0 | 0.4 | | |
| Niagara County | 220,756 | 93.0 | 5.5 | 0.9 | | |
| Oneida County | 250,836 | 92.7 | 5.4 | 0.2 | | |
| Onondaga County | 468,973 | 89.2 | 8.0 | 0.7 | | |
| Ontario County | 95,101 | 97.0 | 1.8 | 0.2 | | |
| Orange County | 307,647 | 88.9 | 7.2 | 0.3 | | |

The tables on this page show several ways of reconfiguring data in the 1990 census P.L. files using commercial software compatible with dBASE. The top table shows the racial composition of counties in New York State. You can do this for any State—and for much smaller areas as well.

Suppose you were a housing authority analyst trying to assess housing conditions within a metropolitan area. The 1990 census P.L. files have very little housing information, but enough to enable you to draw some conclusions. As this table shows, you can determine population and housing density for census tracts. The *Summary Tape Files* on CD have a wealth of housing information you can add to this picture.

POPULATION AND HOUSING DENSITY IN CHICAGO CITY CENSUS TRACTS

| Area Name | Land Area | Total Population | Housing Unit | Population Per Square Mile | Housing Unit Per Square Mile |
|---|---|---|---|---|---|
| 01ST WARD PCT 01 | | | | | |
| Tract 3201 (pt. | 493 | 372 | 311 | 0.8 | 0.6 |
| Tract 3202 | 128 | 0 | 0 | 0.0 | 0.0 |
| Tract 3203 | 912 | 223 | 2 | 0.2 | 0.0 |
| Tract 3204 (pt. | 859 | 1,832 | 833 | 2.1 | 1.0 |
| Tract 3205 (pt. | 41 | 20 | 0 | 0.5 | 0.0 |
| Tract 3206 (pt. | 78 | 946 | 405 | 12.1 | 5.2 |
| 01ST WARD PCT 02 | | | | | |
| Tract 2839 (pt. | 117 | 1,838 | 541 | 15.7 | 4.6 |
| 01ST WARD PCT 03 | | | | | |
| Tract 3303 (pt. | 318 | 18 | 11 | 0.1 | 0.0 |
| Tract 3304 | 801 | 61 | 40 | 0.1 | 0.0 |
| Tract 3305 | 36 | 11 | 2 | 0.3 | 0.1 |
| Tract 3402 (pt. | 110 | 1,129 | 397 | 10.3 | 3.6 |
| 01ST WARD PCT 04 | | | | | |
| Tract 2828 (pt. | 29 | 237 | 110 | 8.2 | 3.8 |
| Tract 2829 (pt. | 30 | 808 | 272 | 26.9 | 9.1 |
| 01ST WARD PCT05 | | | | | |
| Tract 3303 (pt. | 11 | 0 | 0 | 0.0 | 0.0 |
| Tract 3402 (pt. | 154 | 449 | 305 | 2.9 | 2.0 |
| 01ST WARD PCT07 | | | | | |
| Tract 3201 (pt. | 28 | 795 | 705 | 28.4 | 25.2 |
| 01ST WARD PCT08 | | | | | |
| Tract 3206 (pt. | 113 | 1,185 | 561 | 10.5 | 5.0 |
| 01ST WARD PCT09 | | | | | |
| Tract 2433 (pt. | 76 | 647 | 361 | 8.5 | 4.8 |
| 01ST WARD PCT11 | | | | | |
| Tract 3205 (pt. | 101 | 490 | 295 | 4.9 | 2.9 |
| 01ST WARD PCT12 | | | | | |
| Tract 3301 (pt. | 82 | 1,526 | 706 | 18.6 | 8.6 |
| Tract 3302 (pt. | 126 | 956 | 460 | 7.6 | 3.7 |
| 01ST WARD PCT13 | | | | | |
| Tract 3301 (pt. | 241 | 2,261 | 1,159 | 9.4 | 4.8 |
| 01ST WARD PCT14 | | | | | |
| Tract 2839 (pt. | 179 | 1,274 | 408 | 7.1 | 2.3 |
| 01ST WARD PCT15 | | | | | |
| Tract 3402 (pt. | 159 | 1,313 | 444 | 8.3 | 2.8 |
| 01ST WARD PCT16 | | | | | |
| Tract 3402 (pt. | 420 | 1,117 | 465 | 2.7 | 1.1 |
| 01ST WARD PCT17 | | | | | |
| Tract 2817 (pt. | 116 | 245 | 26 | 2.1 | 0.2 |
| Tract 2818 (pt. | 325 | 2,057 | 800 | 6.3 | 2.5 |
| 01ST WARD PCT18 | | | | | |



BEST COPY AVAILABLE

# Several Data Base Software Options Let You Do More

What's great about the simple *GO* retrieval software is that it's a snap to use! Perhaps the best news is that it comes right on the CD-ROM. The *GO* software will meet the needs of most users.

"But I need some freedom to move," you say. You've got it! Our CD-ROM's allow you to use many different software packages.

**Census Bureau's *EXTRACT* for Specialized Tabulations**

We have developed another software package for IBM PC-compatible microcomputers—known as *EXTRACT*—for use with the economic census data on disc.

*EXTRACT* was designed to help users load subsets of the large files stored on CD-ROM's into spreadsheets, graphics packages, and other commercial software. Our simple *GO* software (described on page 13) allows users to find one record at a time—say, for one census tract or county. *EXTRACT* allows you to select multiple areas—say, all block groups within a place or all counties with 50 or more Hispanic residents.

EXTRACT works with all dBASE-compatible Census Bureau discs, including STF 1, but you must first obtain auxiliary files to work with the discs.

You can download the *EXTRACT* software and documentation free from the Census Bureau's Electronic Bulletin Board (call 301-763-1580 for information) or from the CD-ROM software clearinghouse maintained by the Center for Electronic Data Analysis at the University of Tennessee (615-974-5311).

**Many Commercial Packages Compatible With dBASE**

We must stress that there are other software programs you can use, not just ours. To manipulate the files stored on CD-ROM's, you'll need software compatible with dBASE format. (The TIGER/Line, American Housing Survey, and Current Population Survey files are not in dBASE format.)

These software packages are very powerful and flexible, allowing you to manipulate reams of data.

Using them, you can browse and search through files, selectively display specific records or fields, alter the display, perform calculations, create indexes, and generate reports. Many graphics packages let you import these files so that you can plot graphs, create charts, and display maps.

Our message is simple: Census Bureau CD-ROM's are not hard to use. Use the simple software we include on the discs and you'll have plenty to work with. Learn a few commands in almost any data base software program and you'll be amazed at the host of tabulations you can create.

**Applications Software Sources**

Census Bureau Electronic
Bulletin Board
U.S. Bureau of the Census
Data User Services Division
Washington, DC 20233
Information: 301-763-1580

Center for Electronic
Data Analysis
University of Tennessee
316 Stokley Management Center
Department of Marketing,
Logistics, and Transportation
Knoxville, TN 37996
Information: 615-974-5311

# Take Care of Business with 1987 Economic Census Data on CD-ROM

## EXTRACT Software

Use ARROW keys to scroll up, down, and sideways. Press ESC when finished.

1987 RETAIL TRADE: Summary for Co's & Places 2,500+ RC87A3
Maryland: State total and County Records

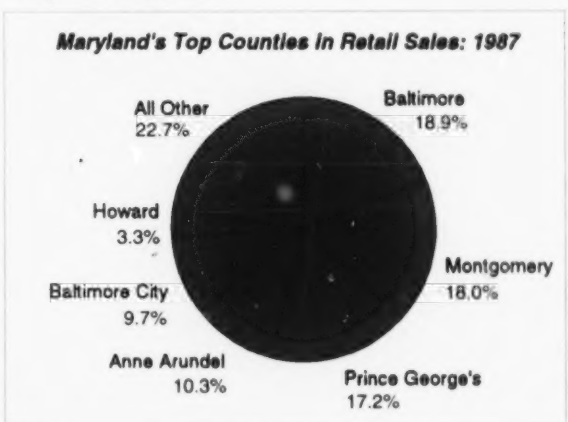
| GEOTEXT | ESTAB | SALES | ESTAB54 | SALES54 |
|---|---|---|---|---|
| Maryland | 26538 | 32009372 | 3359 | 6113435 |
| Allegany | 619 | 496315 | 74 | 103584 |
| Anne Arundel | 2466 | 3282614 | 295 | 601610 |
| Baltimore | 4539 | 6059425 | 492 | 1065178 |
| Calvert | 180 | 169635 | 30 | 44197 |
| Caroline | 123 | 119353 | 30 | 24508 |
| Carroll | 623 | 609893 | 81 | 131207 |
| Cecil | 324 | 395737 | 46 | 65824 |
| Charles | 307 | 529095 | 35 | 102891 |
| Dorchester | 196 | 156853 | 38 | 35071 |
| Frederick | 859 | 929259 | 97 | 192032 |
| Garrett | 182 | 149112 | 28 | 39986 |
| Harford | 813 | 994610 | 106 | 212961 |
| Howard | 834 | 1044707 | 98 | 212598 |
| Kent | 174 | 105703 | 22 | 28044 |
| Montgomery | 3785 | 5761045 | 458 | 1105288 |
| Prince George's | 3501 | 5500002 | 408 | 987436 |

## Data Base Software

READY

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | 1987 RETAIL TRADE: | Summaries for Counties and Places | | | | | |
| 2 | Maryland: | State and County Records | | | | | |
| 3 | GEOTEXT | ESTAB | SALES | ESTAB54 | SALES54 | | |
| 4 | Maryland | 26538 | 32009372 | 3359 | 6113435 | | |
| 5 | Baltimore | 4539 | 6059425 | 492 | 1065178 | | |
| 6 | Montgomery | 3785 | 5761045 | 458 | 1105288 | | |
| 7 | Prince George's | 3501 | 5500002 | 408 | 987436 | | |
| 8 | Anne Arundel | 2466 | 3282614 | 295 | 601610 | | |
| 9 | Baltimore City | 4096 | 3091571 | 605 | 627300 | | |
| 10 | Howard | 834 | 1044707 | 98 | 212598 | | |
| 11 | All other | 7317 | 7270008 | 1003 | 1514025 | | |
| 12 | | | | | | | |
| 13 | Harford | 813 | 994610 | 106 | 212961 | | |
| 14 | Frederick | 859 | 929259 | 97 | 192032 | | |
| 15 | Washington | 774 | 769603 | 101 | 144568 | | |
| 16 | Wicomico | 511 | 613527 | 76 | 109513 | | |
| 17 | Carroll | 623 | 609893 | 81 | 131207 | | |

## Graphics Software




The economic censuses cover most sectors of the U.S. economy and most of these data are on CD-ROM. You can retrieve these data easily using the *EXTRACT* software found on the discs (see page 15).

But since *EXTRACT* can do only rudimentary calculations and no graphics, commercial software you're already using may come to the rescue and permit greater freedom in manipulating the data.

The data on this page are a sample of the data you'll find on our compact discs. The top screen shows retail sales in Maryland, displayed through the *EXTRACT* software. This program allows you to select and extract data to a file that you can then import into a spreadsheet program. The screen shows retail establishments and sales, and food stores and sales in counties.

The second screen shows the same data loaded into a popular spreadsheet software. We are using this software to rank counties by sales and to add together into a single summary counties with less than $1 billion in retail sales (line 11).

The graph shows data from lines 5 to 11. It was created using a popular graphics software.

As you can see here, you can use *EXTRACT* to help you move the data into spreadsheet, data base, statistical, or graphics software you already use.

# *PROFILE* Software Lets You See Economic Panorama for Your State or County

1987 ECONOMIC CENSUSES Page 1

Geographic Area Profile: Retail, Wholesale, Services
DALLAS County, TEXAS

This profile contains information on retail, wholesale, and taxable services establishments with payroll. See page 3 for explanatory notes. See page 4 for information about purchasing data from the 1987 Economic Censuses in printed reports or on CD-ROM (Compact Disc - Read Only Memory).

Table 1A - General Statistics by Sector

| Sector | Year | Number of Estabs | Sales or Receipts ($million) | Annual Payroll ($million) | Number of Employees |
|---|---|---|---|---|---|
| **DALLAS County, TEXAS** | | | | | |
| Retail Trade | 1987 | 12,212 | 14,808.1 | 1,863.4 | 170,465 |
| | 1982 | 10,181 | 10,899.4 | 1,323.6 | 138,978 |
| | 1977 | 9,188 | 5,956.3 | 759.2 | 107,359 |
| Wholesale Trade | 1987 | 6,782 | 55,434.3 | 2,635.4 | 97,796 |
| | 1982 | 5,987 | 45,073.4 | 1,922.2 | 88,451 |
| | 1977 | 4,847 | 25,347.7 | 981.1 | 69,042 |
| Service Industries ** | 1987 | 17,415 | 11,848.0 | 4,466.3 | 218,304 |
| | 1982 | 12,785 | 6,239.6 | 2,231.1 | 140,764 |
| | 1977 | 6,942 | 2,128.2 | 737.9 | 79,862 |
| **TEXAS, TOTAL** | | | | | |
| Retail Trade | 1987 | 101,150 | 97,175.8 | 11,496.0 | 1,174,108 |
| | 1982 | 91,531 | 80,324.5 | 9,408.1 | 1,058,462 |
| | 1977 | 83,351 | 44,323.9 | 5,210.2 | 808,500 |
| Wholesale Trade | 1987 | 35,029 | 192,193.7 | 9,098.3 | 396,138 |
| | 1982 | 31,978 | 204,950.2 | 8,069.6 | 417,493 |
| | 1977 | 26,370 | 87,682.0 | 3,853.4 | 309,616 |
| Service Industries ** | 1987 | 108,431 | 50,953.3 | 18,808.1 | 1,060,911 |
| | 1982 | 85,700 | 32,038.4 | 11,442.2 | 782,959 |
| | 1977 | 46,363 | 10,479.9 | 3,517.5 | 406,573 |

1987 ECONOMIC CENSUSES
Geographic Area Profile
DALLAS County, TEXAS
Page 2

Table 2A - Top Places in DALLAS County, TEXAS
in terms of 1988 population: 1987

| Geo Area Name | Popu-lation (1988) | --- Retail --- Number of Estabs | Sales ($mil) | -- Wholesale -- Number of Estabs | Sales ($mil) | --- Services--- Number of Estabs | Rcpts ($mil) |
|---|---|---|---|---|---|---|---|
| Dallas (part) | 984,380 | 7,251* | 8,594 | 4,382* | 30,634 | 11,395* | 8,262 |
| Garland (part) | 180,450 | 759* | (D) | 291* | 789 | 965* | (D) |
| Irving | 133,000 | 913* | 1,331 | 475* | 8,573 | 1,181* | 946 |
| Mesquite | 93,120 | 630* | 842 | 92 | 395 | 474* | 180 |
| Grand Prairie (part) | 92,100 | 367 | 378 | 177 | 1,420 | 386* | 133 |
| Richardson (part) | 71,130 | 621* | 821 | 399* | (D) | 935* | 476 |
| Carrollton (part) | 36,800 | 314 | 405 | 309* | 5,843 | 427* | 388 |
| Duncanville | 36,450 | 196 | 283 | 55 | 55 | 252 | 54 |
| DeSoto | 29,420 | 141 | 155 | 34 | 41 | 178 | 43 |
| Farmers Branch | 28,500 | 195 | 262 | 282* | 2,839 | 389* | 433 |

* The reports and databases include more Kind-of-Business detail for this place

Table 2B - Sales by Kind of Business - 1987: DALLAS County, TEXAS

| | \|---Top Place--\| Dallas (part) | | \|------- County -------\| DALLAS County | | | \|-State\| (TX) | |
|---|---|---|---|---|---|---|---|
| > Kind of Business < | # of Estab | Sales ($mil) | # of Estab | Sales ($mil) | Sales by KB actr(1) | KB Sls pct of | Sales ($mil) | County Sales % of State |
| Retail Trade | 7,251 | 8,593.8 | 12,212 | 14,808.1 | 100.0 | | 97,175.8 | 15.2 |
| Bldg Materials & Etc | 204 | 237.1 | 429 | 509.3 | 3.4 | | 4,198.1 | 12.1 |
| Gen Mdse Stores | 107 | 1,092.3 | 209 | 1,818.0 | 12.3 | | 12,484.5 | 14.6 |
| Food Stores | 773 | (D) | 1,323 | 2,580.2 | 17.4 | | 21,291.1 | 12.1 |
| Auto Dealers | 445 | (D) | 847 | 3,588.5 | 24.2 | | 22,509.3 | 15.9 |
| Gas Stations | 505 | (D) | 929 | 972.7 | 6.6 | | 7,140.5 | 13.6 |
| Apparel & Accessories | 975 | 640.5 | 1,526 | 937.0 | 6.3 | | 5,417.7 | 17.3 |
| Furniture & Misc | 524 | 440.8 | 926 | 750.2 | 5.1 | | 4,295.5 | 17.5 |
| Eating & Drinking | 1,986 | 1,047.3 | 3,219 | 1,693.0 | 11.4 | | 9,773.3 | 17.3 |
| Drug Stores | 153 | 181.2 | 267 | 324.5 | 2.2 | | 2,626.6 | 12.4 |
| Misc Retail | 1,579 | (D) | 2,537 | 1,634.6 | 11.0 | | 7,439.3 | 22.0 |
| Wholesale Trade | 4,382 | 30,634.0 | 6,782 | 55,434.3 | 100.0 | | 192,193.7 | 28.8 |
| Merchant Wholesalers | 3,150 | 11,332.6 | 4,820 | 18,371.2 | 33.1 | | 103,526.5 | 17.7 |
| Other Wholesalers | 1,232 | 19,301.4 | 1,962 | 37,063.1 | 66.9 | | 88,667.2 | 41.8 |
| Service Indust. ** | 11,395 | 8,262.3 | 17,415 | 11,848.0 | 100.0 | | 50,953.3 | 23.3 |
| Hotels, Motels, Etc. | 158 | (D) | 256 | 703.4 | 5.9 | | 2,369.0 | 29.7 |
| Personal Services | 989 | 241.3 | 1,690 | 361.1 | 3.0 | | 2,159.3 | 16.7 |
| Business Services | 2,556 | (D) | 3,904 | 3,682.3 | 31.1 | | 11,063.3 | 33.3 |
| Auto Repair & Garages | 800 | (D) | 1,366 | 693.2 | 5.9 | | 3,187.0 | 21.8 |
| Misc Repair Services | 331 | (D) | 587 | 298.3 | 2.5 | | 1,741.8 | 17.1 |
| Amusements | 453 | (D) | 775 | 652.5 | 5.5 | | 2,271.3 | 28.7 |
| Health Services ** | 2,492 | 1,472.4 | 3,814 | 2,122.6 | 17.9 | | 12,497.1 | 15.7 |
| Legal Services | 1,209 | 1,121.6 | 1,439 | 1,175.3 | 9.9 | | 4,852.0 | 24.2 |
| Social Services | 173 | 39.2 | 386 | 88.4 | 0.7 | | 516.8 | 17.1 |
| Professional Services | 1,968 | 1,461.2 | 2,805 | 1,920.0 | 16.2 | | 8,707.8 | 22.0 |

[See explanatory notes at end of Table 3B]

Source: 1987 Economic Censuses. See page 4 for purchasing CD-ROM discs or printed reports, or call Census Customer Services on 1 (301) 763-4100.

Users who buy the economic census disc get a surprise in the bargain. On the disc is our *PROFILE* software designed to provide an economic panorama for retail, wholesale, and services.

In no other economic census product can you get an area profile that cuts across so many sectors and years. And we're developing a new version of *PROFILE* to show data for an area from all the economic census programs.

The tables shown on this page show some of the information found in the profile for Dallas County, Texas. The profile shows general statistics by sector (table 1A), selected ratios by sector (1B, obscured), data for the most populous places (2A), and sales by kind of business (2B). The profile contains two more pages also.

A few simple keystrokes lets you display these data for a State or county.

# Your County and City Data Base— and All on One Shiny Disc!

We generated the tables shown here using the simple retrieval software available for use with the CD-ROM containing the ever-popular *County and City Data Book*. This disc contains an all-purpose data base for every county and most cities in the country.

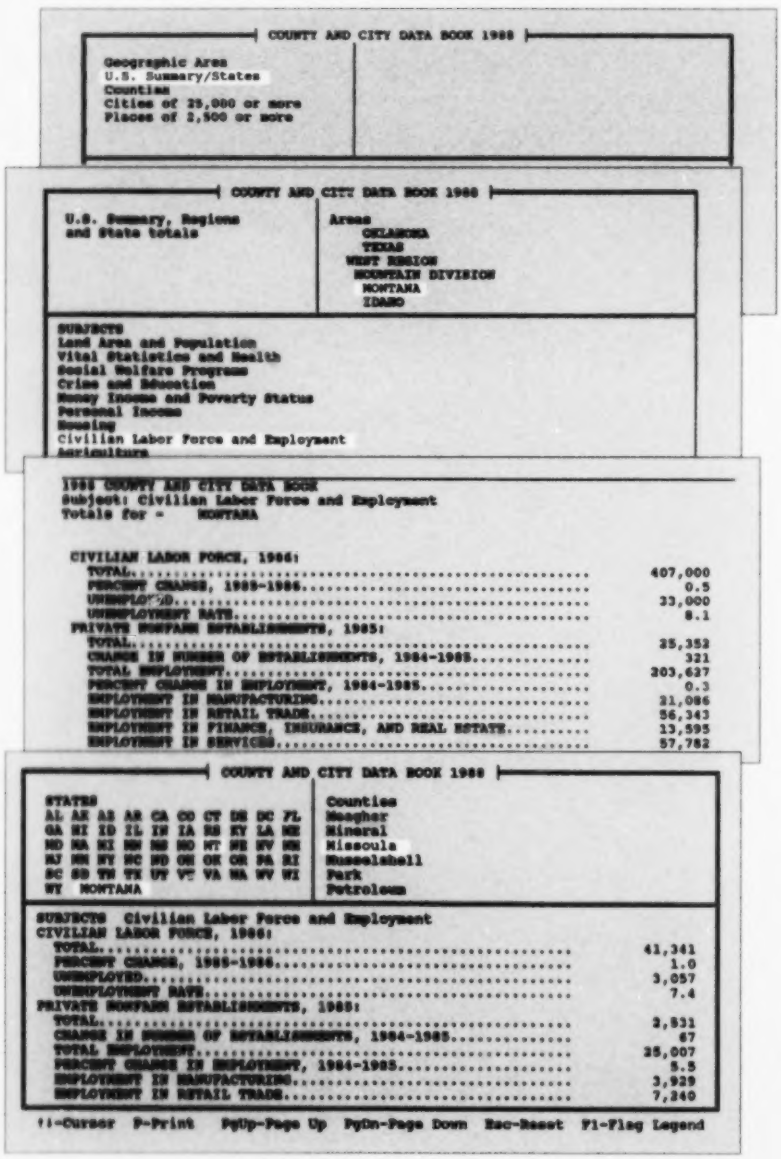
You pick the data you want (population, housing, crime, banking, manufacturing, trade, etc.) and the geographic area (State, county, or city).

The software leads you through a menu offering a range of simple choices. (This is an earlier version of the *GO* software described previously.)

Included with the CD-ROM is a copy of the publication so you can readily identify the item numbers in the table header when you're doing more involved tabulations.

Commercial software allows you to make the tabulations fit your needs. You can manipulate the columns of data to make your own comparisons.

Any spreadsheet software that allows you to import dBASE files will work with our files.



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# Study the Balance of Trade Using CD-ROM

PASS MTR VEH, SPARK IGN ENG, NOT OV 1,000 CC (8703210000)

U.S. Imports Of Merchandise For The Year Through December

| | | |
|---|---|---|
| Dutiable Value | 50,731,794 | |
| Calculated Duty | 1,268,295 | |
| | General Imports | Imports for Consumption |
| Imports-Number | 164,988 | 163,826 |
| Customs Value | 663,614,956 | 658,137,943 |
| Import Charges | 21,620,091 | 21,075,376 |
| Import C.I.F. Charges | 685,235,047 | 679,213,319 |
| | Shipments by Vessel | Shipments by Air |
| Customs Value | 424,047,326 | 148,501 |
| Shipping Weight | 62,145,010 | 9,188 |
| Import Charges | 16,061,303 | 44,170 |

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Imports From JAPAN
District of Entry-LOS ANGELES, CALIFORNIA
District of Unlading-LOS ANGELES, CALIFORNIA

U.S. Imports Of Merchandise For The Year Through December

| | | |
|---|---|---|
| Dutiable Value | 14,460,874 | |
| Calculated Duty | 361,522 | |
| | General Imports | Imports for Consumption |
| Imports-Number | 55,412 | 55,412 |
| Customs Value | 144,211,720 | 144,211,720 |
| Import Charges | 4,974,552 | 4,974,552 |
| Import C.I.F. Charges | 149,186,272 | 149,186,272 |
| | Shipments by Vessel | Shipments by Air |
| Customs Value | 144,186,844 | 24,876 |
| Shipping Weight | 18,522,928 | 3,772 |
| Import Charges | 4,945,417 | 29,135 |

These tables were generated from the Census Bureau's imports file. There is also a file with export data, so you can get the full picture on the balance of trade.

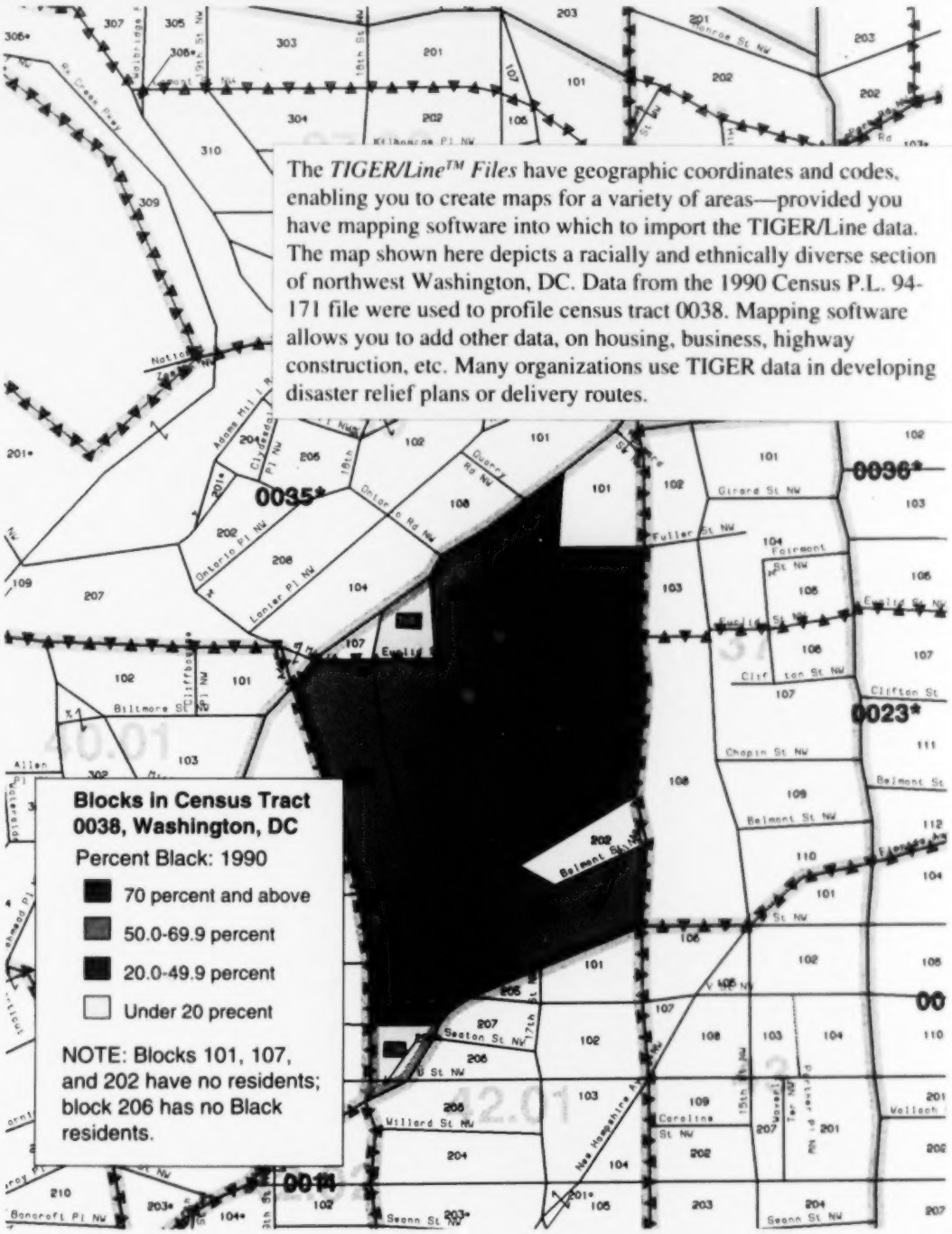
To create these tables, we used the *GO* software, the Census Bureau's retrieval and display software. The software is included on the disc (see page 13).

The first table shows total 1990 imports of passenger motor vehicles with engines smaller than 1,000 cubic centimeters. The file also has statistics for other engine sizes and for commercial vehicles.

The software lets you display all the imports coming in from one country through one port. Our software lets you see imports for individual countries or ports.

The *GO* software also lets you print out a report showing all the countries exporting a particular commodity to the United States. In the case shown here, this feature would tell you all the countries exporting passenger motor vehicles, with spark ignition engines smaller than 1,000 cubic centimeters, to the United States.

## Get the Right Software and You Can Create Maps Too!




The *TIGER/Line™ Files* have geographic coordinates and codes, enabling you to create maps for a variety of areas—provided you have mapping software into which to import the TIGER/Line data. The map shown here depicts a racially and ethnically diverse section of northwest Washington, DC. Data from the 1990 Census P.L. 94-171 file were used to profile census tract 0038. Mapping software allows you to add other data, on housing, business, highway construction, etc. Many organizations use TIGER data in developing disaster relief plans or delivery routes.

## What Else Do You Need to Know?

In this booklet, we've only begun to tell you about the data available from the Census Bureau. As we said earlier, these data come in many forms: in print, on computer tape, on microfiche—and, of course, on CD-ROM.

To learn more about a particular CD-ROM product described here, simply send the form included in this booklet to our Customer Services and get a more detailed order form. If you like, you can call us at 301-763-4100.

If you're electronically minded, check out the Census Bureau Electronic Bulletin Board or the University of Tennessee's CD-ROM clearinghouse (see page 15).

Here are some other ways to learn about us: Call Customer Services and ask to be put on the mailing list for the *Monthly Product Announcement*, a listing of Census Bureau products released each month. It's free!

Or subscribe to our monthly newsletter, *Census and You*, which tells you more about the statistics you'll find in our data products. It costs $18 a year—a bargain!

To subscribe, you can call the U.S. Government Printing Office (202-783-3238) and charge your subscription to your credit card, or send a check for $18 to the U.S. Government Printing Office, Washington, DC 20402. Make the check payable to the Superintendent of Documents and use order code "DUN."

If you want to learn as much as you can about Census Bureau data products and have the information within easy reach, get our annual *Census Catalog and Guide*. It describes all our reports, tapes, discs, etc. and identifies numerous data sources on the local scene. You can purchase it for $15 from the Government Printing Office (S/N 003–024–07271–8).

The TIGER/Line™ files have the geographic information you need to do computer-mapping for any area in the country—provided you have the necessary mapping software. CD-ROM is the perfect medium to use in working with the huge TIGER/Line files.

*TIGER: The Coast-to-Coast Map Data Base* describes the TIGER files available to the public and the ways in which users are already working with these files. Single copies are free from Customer Services.

***Census and You***

***Census Catalog and Guide***

***TIGER: The Coast-to-Coast Map Data Base***

*Census '90 Basics*

*Factfinder for the Nation, Data for Small Communities*

*Hidden Treasures! Census Bureau Data and Where to Find It!*

If you want to learn more about the 1990 census, be sure to get copies of *Census '90 Basics* and *Census ABCs*. The first describes how we conducted the census and what information you can expect to get from the data products. The second discusses the various ways in which people use census data. *Census '90 Basics* and *Census ABC's* are free from Customer Services.

To learn about specific Census Bureau products or programs, you can't do better than our *Factfinder for the Nation* series. These short brochures profile our data on population, housing, race groups, manufactures, mineral industries, and other topics. Ask Customer Services for a complete list of titles. Single copies of *Factfinders* are free from Customer Services.

Finally, who said you had to call Washington to get census data? Many organizations across the country can provide our data, often in customized formats. *Hidden Treasures! Census Bureau Data and Where to Find It!* is your key to finding all these local treasure troves. Single copies free from Customer Services.

## We Have Data Online Too!

If you've got a modem, you have even faster access to Census Bureau data. We operate an online data system through two vendors: CompuServe (1-800-848-8199) and DIALOG Information Services (1-800-334-2564). On CENDATA™, you'll find up-to-date statistics on a host of subjects—population, housing, business, industry, income, foreign trade, and others. You must be a subscriber of one of the vendors to use CENDATA.

Do you routinely need Census Bureau information (such as manufacturers' shipments and inventories) the day that they're released? Do you want to create a profile of your area using the latest data from the 1990 census without buying the STF's? CENDATA may be just what you need. Contact the Census Bureau (301-763-2074) for a booklet.



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## I Want More Information!

To get order forms describing CD-ROM's available now, contact Customer Services at the Census Bureau (Washington, DC 20233). Ask for any of the following order forms:

_____ American Housing Survey

_____ Census of Agriculture (1978, 1982, and 1987)

_____ Census of Population and Housing (1990)

_____ County and City Data Book

_____ County Business Patterns (1986 and 1987; 1987 and 1988)

_____ Current Population Survey

_____ Economic Censuses (1982 and 1987)

_____ Import and Export Data (monthly subscription)

_____ TIGER/Line Files

Send me the order forms checked above!

Name _____

Address _____

_____

_____